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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,576	10/31/2000	Albert Daniel Duree	1105a	1354

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EXAMINER

TON, ANTHONY T

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 08/04/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/702,576

Applicant(s)

DUREE ET AL.

Examiner

Anthony T Ton

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sauer et al.** (US Patent No. **6,034,950**) in view of **Farris et al.** (US Patent No. **5,592,477**), hereinafter referred to as **Sauer** and **Farris**, respectively.

a) **Regarding to Claim 1: Sauer disclosed** a communication system comprising:

a first signaling processor configured to receive and process call signaling to generate and transfer a first control message (*see Fig.1B: BSC 220; and see col.7 lines 14-67: herein the 220 receives a calling signaling from the ATM Switch 251 and transfers a control message to the transcoder XC 252*) indicating **an identifier**; and

a first interworking unit configured to receive voice-band communications and the first control message (*see Fig.4: Interworking Unit 303 that receives the control message from the BSC 220 and the voice-band message from the ATM Switch 251 (see Fig.1A, XC 252 for more details)*), determine if initial voice-band processing is required, perform the initial voice-band processing if required (*see Fig.4: voice processor 301 and 302*), convert the voice-band communications into asynchronous communications with the identifier (*see Fig.4: ATM cell processor SAR 305; and see col.10 line 59- col.11 line 8: SCI channel or packet identifier*), and with a processing indicator indicating if the initial voice-band processing was performed (*see*

col.9 lines 27-31: the XC 252 transcoder utilizing an AAL1 protocol (hence, there is an indicator bit (convergence sublayer bit) in an ATM cell for AAL1)), and transfer the asynchronous communications (see Fig.4: cell bus 308 and see Fig.1A: ATM SW 251).

Sauer failed to explicitly disclose an identifier indicated by the first control message *(wherein an identifier is included in a control message when a control processor sending a signaling message to a local router for setting a connection).*

Farris clearly disclosed such an identifier *(see Fig.6 and col.26 lines 58-59: Octet 14 contains a message type indicator).*

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such an identifier, as taught by Farris with Sauer, so that an appropriate setup can be established to communication terminals. The motivation for doing so would have been to provide communication link efficiency to communication terminals in a communication network. Therefore, it would have been obvious to combine Farris and Sauer the invention as specified in the claim.

b) Regarding to Claim 2: Sauer and Farris disclosed all aspects of this claim as set forth in claim 1.

Sauer and Farris failed to explicitly disclose the communication system further comprising a second interworking unit configured to receive the asynchronous communications, convert the asynchronous communications into the voice-band communications, determine if the initial voice-band processing was performed based on the processing indicator, perform additional voice-band processing if the initial voice-band processing was performed, and transfer the voice-band communications.

Although both Sauer and Farris do not specifically disclose the claim limitations relating to a second interworking unit as the instant claim, such a second interworking unit is normally located at the receiving side of a communication network, which is opposite side to the transmitting side of the first interworking unit as disclosed in the claim 1. Therefore, such a second interworking unit would be obvious to one having ordinary skill in the art.

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such a second interworking unit teaching as the instant claim with Sauer, so that communications information can be processed and transmitted to a receiving terminal properly. The motivation for doing so would have been to provide suitable and reliable communications information to destination devices in a communication network. Therefore, it would have been obvious to combine the instant claim and Sauer the invention as specified in the claim.

c) Regarding to Claims 3, 4 and 5: Sauer and Farris disclosed all aspects of these claims as set forth in claims 1 and 2.

Sauer and Farris failed to explicitly disclose wherein the initial voice-band processing comprises encryption and the additional voice-band processing comprises decryption as recited in claim 3; wherein the initial voice-band processing comprises compression and the additional voice-band processing comprises decompression as recited in claim 4; and wherein the initial voice-band processing comprises echo cancellation as recited in claim 5.

However, such encryption, decryption, compression, decompression, and echo cancellation to an initial voice-band processing would be obvious to one having ordinary skill in the art.

Therefore, at the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such encryption, decryption, compression, decompression, and echo cancellation to an initial voice-band processing teaching as the instant claims with Sauer, in order to get a lower bit rate, or to secure the information, as well as filtering a unwanted signal caused by echoes from a main transmitted signal. The motivation for doing so would have been to make Sauer or Farris more reliable. Thus, it would have been obvious to combine the instant claims and Sauer the invention as specified in the claims.

d) Regarding to Claim 6: Sauer further disclosed wherein the identifier indicates an asynchronous transfer mode connection, the asynchronous communications comprise asynchronous transfer mode communications, and the first interworking unit is configured to transfer the asynchronous transfer mode communications over the asynchronous transfer mode connection (*see abstract and Fig.2, ATM Hub Cell Switch and AAL1*).

e) Regarding to Claim 7: Sauer and Farris disclosed all aspects of this claim as set forth in claims 1 and 6.

Sauer failed to explicitly disclose wherein the processing indicator comprises an asynchronous transfer mode convergence sublayer indicator.

However, Sauer inherently disclosed such an ATM convergence sublayer indicator (CSI) because Sauer disclose a network interface NI 254 that provides for data accumulation and AAL1 interworking, the data flows from the network interface to the XC 252 transcoder utilizing an AAL1 protocol to provide for cell switching function (*hence, there is an ATM CSI in an ATM cell associated with the AAL1 protocol*) (*see Fig.2*).

Therefore, at the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such an ATM CSI teaching as the instant claims with Sauer, in order to get an proper traffic class to data communications. The motivation for doing so would have been to provide a mechanism for mixing the different requirements of voice, video, and data by defining a number of classes of service, each with the appropriate parameters for the service. Thus, it would have been obvious to combine the instant claims and Sauer the invention as specified in the claim.

f) **Regarding to Claim 8: Sauer disclosed** all aspects of this claim as set forth in claim 1.

Sauer failed to explicitly disclose wherein the call signaling comprises an initial address message.

Farris does not specifically disclose an initial address message (IAM) as the instant claim. However, the IAM is one of the well-known designations for various SS7 messages commonly are used, and **Farris explicitly discloses** an SS7 message (*see Fig.5*).

Therefore, at the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such an IAM teaching as the instant claims with Farris, so that control messages can be distinguished to each other. The motivation for doing so would have been to make Farris more reliable. Thus, it would have been obvious to combine the instant claims and Farris the invention as specified in the claim.

g) **Regarding to Claim 9: Sauer further disclosed** the first control message indicating a type of the initial voice band processing (*see col.7 lines 33-33: two type of data using ATM format*); and

the first interworking unit is configured to determine if the initial voice-band processing is required, and perform the type of the initial voice-band processing based on the first control message (*see Fig.4 and col.7 lines 21-23*).

h) Regarding to Claim 10: Sauer and Farris disclosed all aspects of this claim as set forth in claim 1.

Sauer and Farris failed to explicitly disclose a second signaling processor configured to receive and process the signaling message to generate and transfer a second control message indicating the identifier; and

a second interworking unit configured to receive the asynchronous communications and the second control message, convert the asynchronous communications into the voice-band communications, determine if the initial voice-band processing was performed based on the processing indicator, perform additional voice-band processing if the initial voice-band processing was performed.

Although both Sauer and Farris do not specifically disclose the claim limitations relating to a second signaling processor and a second interworking unit as the instant claim, such a second signaling processor and a second interworking unit are normally located at the receiving side of a communication network, which is opposite side to the transmitting side of the first signaling processor and the first interworking unit as disclosed in the claims 1 and 2. Therefore, such a second signaling processor and a second interworking unit would be obvious to one having ordinary skill in the art.

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such a second signaling processor and a second interworking unit teaching as the instant

claim with Sauer, so that communications information can be processed and transmitted to a receiving terminal properly. The motivation for doing so would have been to provide suitable and reliable communications information to destination devices in a communication network. Therefore, it would have been obvious to combine the instant claim and Sauer the invention as specified in the claim.

i) **Regarding to Claim 11:** all claimed subject matters of this claim are the same as to that in claims 1, 2 and 10. Therefore, the rejection to the claims 1, 2 and 10 would also apply to reject this claim.

j) **Regarding to Claim 12:** Sauer and Farris disclosed all aspects of this claim as set forth in claim 11, **except for** wherein the signaling message comprises an initial address message. However, this claimed limitation is similar to the claim 8. Therefore, the rejection on claim 8 would be applied to claim 12.

k) **Regarding to Claims 13-18:** Sauer and Farris disclosed all aspects of this claim as set forth in claim 11; the claimed limitations in the claims 3-8 are the same as that in the claims 13-18. Therefore, the rejection to claims 3-8 would be applied to the claims 13-18, respectively.

l) **Regarding to Claims 19-36:** These claims are rejected for the same reasons as claims 1-18, respectively because the method steps these claims can be practice with the apparatus in the claims 1-18.

Response to Arguments

3. Applicant's arguments filed on **May 13, 2004** with respect to **claims 1-36** have been considered but are moot in view of the new ground(s) of rejection.

Examiner Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony T Ton whose telephone number is 703-305-8956. The examiner can normally be reached on M-F: 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Olms can be reached on 703-305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

ATT
7/21/04


Phirin Sam